Application No. 10/675,877
Amendment dated September 5, 2006
Response to Office Action of June 05, 2006

Atty. Docket No. 42390.P17241
Examiner Vo, Ted T.
TC/A.U. 2191

Amendment to the Specification:

Please replace the paragraph starting on line 5 of page 2 with the following amended paragraph:

"Modern operating systems often have access to optimized instruction sets (or routines) for execution on particular pieces of hardware. For example, the ~~Intel Pentium~~ **INTEL® PENTIUM®** III processor includes an instruction set called SSE (Streaming SIMD (Single Instruction, Multiple Data) Extensions). SSE is a set of microprocessor instructions that allow software to tell the processor to carry out specific operations. By using these routines optimized for the ~~Pentium~~ **PENTIUM®** III, operating systems and software applications can maximize the capabilities of the CPU (central processing unit). The optimized instructions reduce the overall number of instructions required to execute a particular program task and as a result can contribute to an overall performance increase of an operating system and/or application."

Please replace the paragraph starting on line 5 of page 5 with the following amended paragraph:

"The operating system environment described herein gives an overview of structures common to most operating systems. One skilled in the art will recognize that embodiments of the present invention may be implemented in particular operating system, such as, but not limited to, ~~Microsoft Windows~~ **MICROSOFT® WINDOWS®**, the ~~Apple Macintosh OS~~ **APPLE® MAC OS®**, UNIX®, ~~Linux~~ **LINUX®**, or the like. Additionally, examples of C programming code are provided herein as illustrations. It will be understood that embodiments of the present invention are not limited to the programming examples herein and may be implemented using various programming languages and methods."

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Please replace the paragraph starting on line 13 of page 5 with the following amended paragraph:

"In one embodiment of the present invention, firmware of a computer system operates in accordance with an extensible firmware framework known as the Extensible Firmware Interface (EFI) (EFI Specification, Version 1.10, December 1, 2002, ~~may be found at http://developer.intel.com/technology/efi~~ **developed by INTEL®**). EFI is a public industry specification that describes an abstract programmatic interface between platform firmware and shrink-wrap operating systems or other custom application environments. The EFI framework standard includes provisions for extending BIOS functionality beyond that provided by the BIOS code stored in a platform's BIOS device (e.g., flash memory). More particularly, EFI enables firmware, in the form of firmware modules and drivers, to be loaded from a variety of different resources, including, but not limited to, primary and secondary flash devices, option ROMs (Read-Only Memory), various persistent storage devices (e.g., hard disks, CD-ROM (Compact Disk Read Only Memory), etc.), and from one or more computer systems over a computer network."

Please replace the paragraph starting on line 12 of page 6 with the following amended paragraph:

"For example, a CPU has optimized routines that software executing on the CPU can take advantage of to speed up the software's performance. When software is compiled, the compiler generates object code according to the CPU that the software will be executed on. However, if software is compiled for an older CPU with an older instruction set, such as the SSE instruction set, then the software cannot take advantage of the new instructions tailored for a newer CPU, such as SSE2 for the ~~Intel Pentium~~ **INTEL® PENTIUM®** IV. Other devices, such as a chipset, and memory modules, may also have optimized routines available."

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Please replace the paragraph starting on line 18 of page 7 with the following amended paragraph:

"The optimized library is advertised by the firmware of the computer system. In one embodiment, the optimized routine library is advertised through Advanced Configuration and Power Interface (ACPI) methods (~~specification available at www.acpi.info~~ **ACPI Revision 2.0c, released August 25, 2003 by COMPAQ®, INTEL®, MICROSOFT®, PHOENIX® TECHNOLOGIES and TOSHIBA®**). In one embodiment, the optimized routine library is advertised in a Secondary System Description Table (SSDT). In another embodiment, the optimized library is advertised through an ACPI E820 map."

Please replace the paragraph starting on line 10 of page 13 with the following amended paragraph:

"When the application 110 makes an optimized function call, the user library uses the export table 312 to find the address of the optimized function for execution. In one embodiment, each application in user mode space has its own export table. In one embodiment, the export table 312 is similar to the import and export tables associated with a Dynamic Link Library (DLL) of the ~~Microsoft Windows~~ **MICROSOFT® WINDOWS®** OS."

Please replace the paragraph starting on line 16 of page 19 with the following amended paragraph:

"Processor 502 may be a conventional microprocessor including, but not limited to, an ~~Intel~~ **INTEL®** Corporation x86, ~~Pentium~~ **PENTIUM®**, or ~~Itanium~~ **ITANIUM®** family microprocessor, a ~~Motorola~~ **MOTOROLA®** family microprocessor, or the like. Memory 504 may include, but not limited to, Dynamic Random Access Memory (DRAM), Static Random Access Memory (SRAM),

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Synchronized Dynamic Random Access Memory (SDRAM), Rambus Dynamic Random Access Memory (RDRAM), or the like. Display controller 508 controls in a conventional manner a display 510, which in one embodiment may be a cathode ray tube (CRT), a liquid crystal display (LCD), and active matrix display or the like. An input/output device 518 coupled to input/output controller 516 may be a keyboard, disk drive, printer, scanner and other input and output devices, including a mouse, trackball, trackpad, joystick, or other pointing device."

Please replace the paragraph starting on line 15 of page 20 with the following amended paragraph:

"For the purposes of the specification, a machine-readable medium includes any mechanism that provides (i.e., stores and/or transmits) information in a form readable or accessible by a machine (e.g., a computer, network device, personal digital assistant, manufacturing tool, any device with a set of one or more processors, etc.). For example, a machine-readable medium includes, but is not limited to, recordable/non-recordable media (e.g., a read only memory (ROM), a random access memory (RAM), a magnetic disk storage media, an optical storage media, a flash memory device, etc.). ~~In addition, a machine-readable medium can include propagated signals such as electrical, optical, acoustical or other form of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.).~~"

Please replace the paragraph starting on line 3 of page 21 with the following amended paragraph:

"It will be appreciated that computer system 500 is one example of many possible computer systems that have different architectures. For example, computer systems that utilize the ~~Microsoft Windows~~ **MICROSOFT® WINDOWS®** operating system in combination with ~~Intel~~ **INTEL®** microprocessors often have multiple buses, one of which may be considered a peripheral bus. Network

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computers may also be considered as computer systems that may be used with the present invention. Network computers may not include a hard disk or other mass storage, and the executable programs are loaded from a corded or wireless network connection into memory 504 for execution by processor 502. In addition, handheld or palmtop computers, which are sometimes referred to as personal digital assistants (PDAs), may also be considered as computer systems that may be used with the present invention. As with network computers, handheld computers may not include a hard disk or other mass storage, and the executable programs are loaded from a corded or wireless network connection into memory 504 for execution by processor 502. A typical computer system will usually include at least a processor 502, memory 504, and a bus 506 coupling memory 504 to processor 502."

Please replace the paragraph starting on line 19 of page 21 with the following amended paragraph:

"It will also be appreciated that in one embodiment, computer system 500 is controlled by operating system software that includes a file management system, such as a disk operating system, which is part of the operating system software. For example, one embodiment of the present invention utilizes ~~Microsoft Windows~~ **MICROSOFT® WINDOWS®** as the operating system for computer system 500. In other embodiments, other operating systems that may also be used with computer system 500 include, but are not limited to, the ~~Apple Macintosh operating system~~ **APPLE® MAC OS® operating system**, the ~~Linux~~ **LINUX®** operating system, the ~~Microsoft Windows~~ **MICROSOFT® WINDOWS®** CE operating system, the ~~Unix~~ **UNIX®** operating system, the ~~3Com Palm~~ **3COM® PALM®** operating system, or the like."